

### **ABSTRACT**

The invention relates to a device and a method for analyzing the interaction between one or more molecular species the method comprising the steps of creating streams of digital data, transferring the stream of digital data through a substrate, manipulating the molecular structure of the substrate by adding or subtracting molecules or groups of molecules to be examined to or from the substrate, receiving the streams of digital data transferred through the substrate, decoding the identity of an examined molecule or group of molecules interacting with the substrate by deciphering how the molecules affinity to another molecule or group of molecules or molecular sensor or group of molecular sensors alters the stream of digital data. The invention relates further to a method for identifying molecular species, and to a device for identifying molecular species and to a substrate for analysing the interaction and for identifying molecular species.